

and not necessarily for describing a sequential or chronological order. It is to be understood that the terms so used are interchangeable under appropriate circumstances (unless clearly disclosed otherwise) and that the embodiments of the disclosure described herein are capable of operation in other sequences and/or arrangements than are described or illustrated herein.

What is claimed is:

1. A syringe pump for administering an agent to a patient, the syringe pump comprising:

a lead screw;

a cam;

a grasper assembly having first and second graspers arms each having a first end and a second end, wherein the second ends of the first and second grasper arms are configured to engage with the lead screw, the first and second grasper arms are pivotally coupled together, the first ends of the first and second grasper arms are configured to engage with the cam such that actuation of the cam toward the grasper assembly causes the second ends of the first and second grasper arms to pivotally approach each other, and the second ends of the first and second grasper arms each includes threads configured to engage the lead screw when the second ends of the first and second grasper arms approach each other caused by actuation of the cam; and

a plunger head coupled to said grasper assembly and operative to drive a plunger of a syringe into a barrel of said syringe.

2. The syringe pump of claim 1, further comprising:

a first plunger flange clamp jaw; and

a second plunger flange clamp jaw,

wherein the first and second plunger flange clamp jaws are configured to be actuated from a first position to a second position.

3. The syringe pump of claim 2, wherein the plunger head further comprises a pressure sensor for monitoring a pressure of the agent being dispensed from the syringe.

4. The syringe pump of claim 3, wherein a plunger flange of the syringe is held against the pressure sensor.

5. The syringe pump of claim 4, wherein the plunger flange of the syringe is held against the pressure sensor by at least one of the first plunger flange clamp jaw and the second plunger flange clamp jaw.

6. The syringe pump of claim 1, wherein the syringe pump further comprises a barrel flange clip, said barrel flange clip configured to retain a barrel flange of the syringe.

7. The syringe pump of claim 6, wherein the barrel flange clip comprises an optical sensor and a light source configured to detect a presence of the barrel flange, said light source obscured in the presence of said barrel flange.

8. The syringe pump of claim 1, wherein the plunger head includes a user actuator operatively coupled to the cam to actuate the cam toward and away from the grasper assembly.

9. The syringe pump of claim 1, further comprising a spacer coupled to one of the first and second grasper arms.

10. The syringe pump of claim 1, further comprising a pivot pin configured to provide the pivotal coupling between the first and second grasper arms.

11. The syringe pump of claim 1, wherein the cam includes two ramping surfaces configured to engage with the first ends of the first and second grasper arms.

12. The syringe pump of claim 1, further comprising a bias member configured to bias the second ends of the first and second grasper arms away from each other.

13. The syringe pump of claim 12, wherein the bias member is a spring.

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